

CLAIMS

What is claimed is:

1. A method for generating a fast busy signal in a data network comprising:
 - receiving a request to make a connection from a calling device to a called device at a predetermined level of quality of service (QOS);
 - retrieving resource information from a model to determine whether resources are available to make the connection at the predetermined level of QOS; and
 - providing a fast busy signal to the calling device if there are insufficient available resources to make the connection at the predetermined level of QOS.
 2. The method of claim 1 wherein the connection is over the Internet.
 3. The method of claim 1 wherein the connection is for a voice over data service.
 4. The method of claim 3 wherein the voice over data service is selected from a group consisting of voice over IP, voice over xDSL, and voice over ATM.
 5. The method of claim 1 wherein the fast busy signal is an audio tone.
 6. The method of claim 1 wherein the fast busy signal is a data packet.
 7. The method of claim 1 wherein the fast busy signal is a dialog box.
 8. The method of claim 1 wherein the resources include available bandwidth.
 9. The method of claim 1 wherein the model is in Resource Description Framework (RDF) format.
 10. The method of claim 1 wherein the model contains information about a node.

11. The method of claim 1 wherein the model contains information about the calling device.

12. A data network comprising:

a softswitch;

5 a calling device and a called device;

a communications path between the calling and called devices; and

10 a resource information system (RIS) coupled to the softswitch, the RIS having access to a model containing information about resources on the data network, wherein the RIS is operable to inform the softswitch to initiate the sending of a fast busy signal to the calling device if there are insufficient resources to make a connection along the communications path at a predetermined level of quality of service (QOS).

13. The data network of claim 12 wherein the model is in Resource Description Framework (RDF) format.

14. The network of claim 12 wherein the calling device includes a computer.

15. The network of claim 12 wherein the calling device includes a traditional telephone.

16. The network of claim 12 wherein the communications path is part of the Internet.

20 17. The data network of claim 12 wherein the connection is for a voice over data service.

18. The network of claim 17 wherein the voice over data service includes voice over IP.

19. A method for generating a fast busy signal comprising:
providing a softswitch;
requesting the softswitch to make a connection between a first device and
a second device at a predetermined level of quality of service (QOS);
5 querying a model to determine whether there are available resources to
make the connection at the predetermined level of QOS; and
informing the switch to initiate the generation of a fast busy signal if the
available resources are insufficient to make the connection at the predetermined
level of QOS.

10 20. The method of claim 19 wherein the connection is for a multimedia service.

21. The method of claim 19 wherein the connection is for a voice over data
service.

15 22. The method of claim 21 wherein the voice over data service includes voice
over IP.

23. The method of claim 19 wherein the connection is over the Internet.

24. The method of claim 19 wherein the QOS includes bandwidth.